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1 **IN THE CLAIMS:**

3 Claim Listing:

5 1. (Previously Presented) A method of using Si-Ge-C in selective etch  
6 applications, comprising:  
7 growing one or more layers on a single crystal silicon substrate, at least one of  
8 which is a Si-Ge-C layer, wherein the carbon of the Si-Ge-C layer is an amount from 1  
9 to 10 atomic percent and sufficient to exhibit etch selectivity with respect to the single  
10 crystal silicon substrate and/or one or more of the layers adjacent the Si-Ge-C layer;  
11 and  
12 etching with a liquid etchant, the Si-Ge-C layer and the single crystal silicon  
13 substrate and/or one or more of the layers adjacent the Si-Ge-C layer.

14  
15 Claims 2-20 (Canceled).

16  
17 Claims 21-24 (Never Entered).

18  
19 Claim 25 (Canceled).

20  
21 Claim 26-44 (Never Entered).

22  
23 Claim 45 (Canceled).

24  
25 Claim 46 (Never Entered)

26  
27 Claim 47-48 (Canceled).

28 49. (Previously Presented) The method of claim 1, wherein the Si-Ge-C  
29 layer etches slower than the one or more adjacent layers.  
30

1           50.   (Previously Presented)   The method of claim 1, wherein the Si-Ge-C  
2 layer etches slower than the single crystal silicon substrate.

3  
4           51.   (Previously Presented)   The method of claim 1, wherein the Si-Ge-C  
5 layer etches faster than the one or more adjacent layers.

6  
7           52.   (Previously Presented)   The method of claim 1, wherein the Si-Ge-C  
8 layer etches faster than the single crystal silicon substrate.

9  
10          53.   (Previously Presented)   The method of claim 1, wherein the etching  
11 includes applying an etchant selected from the group of KOH and HNA.

12  
13          54.   (Previously Presented)   A method of using Si-Ge-C in selective etch  
14 applications in conjunction with a single crystal substrate, comprising:  
15           growing one or more epitaxial layers sequentially, starting at the single crystal  
16 substrate surface, wherein at least one of the epitaxial layers comprises Si-Ge-C,  
17 wherein the carbon of the Si-Ge-C layer is from 1 to 5 atomic percent; and  
18           etching with a liquid etchant, the Si-Ge-C layer and the single crystal substrate  
19 and/or one or more of the epitaxial layers adjacent the Si-Ge-C layer.

20  
21          55.   (Previously Presented)   The method of claim 54, wherein the Si-Ge-C  
22 layer etches slower than the one or more adjacent epitaxial layers.

23  
24          56.   (Previously Presented)   The method of claim 54, wherein the Si-Ge-C  
25 layer etches slower than the single crystal substrate.

26  
27          57.   (Previously Presented)   The method of claim 54, wherein the Si-Ge-C  
28 layer etches faster than the one or more adjacent epitaxial layers.

29  
30          58.   (Previously Presented)   The method of claim 54, wherein the Si-Ge-C  
layer etches faster than the single crystal substrate.

1  
2       59.   (Previously Presented)   The method of claim 54, 55, 56, 57, or 58,  
3 wherein the single crystal substrate is a material selected from the group of silicon,  
4 silicon-germanium, and germanium.

5  
6       60.   (Previously Presented)   The method of claim 54, wherein the etching  
7 includes applying an etchant selected from the group of KOH and HNA.

8  
9       61.   (Previously Presented)   A method of using Si-Ge-C in selective etch  
10 applications in conjunction with a substrate, comprising:  
11       growing one or more layers sequentially, starting at the substrate, wherein at  
12 least one of the layers comprises Si-Ge-C, wherein the carbon of the Si-Ge-C layer is  
13 from 1 to 10 atomic percent; and  
14       etching with a liquid etchant, the Si-Ge-C layer and one or more layers adjacent  
15 to the Si-Ge-C layer and/or the substrate.

16  
17       62.   (Previously Presented)   The method of claim 61, wherein the Si-Ge-C  
18 layer etches slower than the one or more adjacent layers.

19  
20       63.   (Previously Presented)   The method of claim 61, wherein the Si-Ge-C  
21 layer etches slower than the substrate.

22  
23       64.   (Previously Presented)   The method of claim 61, wherein the Si-Ge-C  
24 layer etches faster than the one or more adjacent layers.

25  
26       65.   (Previously Presented)   The method of claim 61, wherein the Si-Ge-C  
27 layer etches faster than the substrate.

28  
29       66.   (Previously Presented)   The method of claim 61, 62, 63, 64, or 65,  
30 wherein the substrate is a material selected from the group of silicon, silicon-  
germanium, and germanium.

1  
2        67.    (Previously Presented)    The method of claim 61, wherein the etching  
3 includes applying an etchant selected from the group of KOH and HNA.

4  
5        68.    (Presently Presented)    A method of using Si-Ge-C in selective etch  
6 applications, comprising:

7        growing one or more layers on a single crystal silicon substrate, at least one of  
8 which is a Si-Ge-C layer, wherein the carbon of the Si-Ge-C layer is in an amount from  
9 1 to 10 atomic percent and sufficient to exhibit etch selectivity with respect to the single  
10 crystal silicon substrate and/or one or more of the layers adjacent the Si-Ge-C layer;  
11 and (Presently Presented)

12        etching with a liquid etchant, the Si-Ge-C layer and the single crystal silicon  
13 substrate and/or one or more of the layers adjacent the Si-Ge-C layer wherein the Si-  
14 Ge-C layer etches slower than the one or more adjacent layers.

15  
16        69.    (Presently Presented)    A method of using Si-Ge-C in selective etch  
17 applications, comprising:

18        growing one or more layers on a single crystal silicon substrate, at least one of  
19 which is a Si-Ge-C layer, wherein the carbon of the Si-Ge-C layer is in an amount from  
20 1 to 10 atomic percent and sufficient to exhibit etch selectivity with respect to the single  
21 crystal silicon substrate and/or one or more of the layers adjacent the Si-Ge-C layer;  
22 and

23        etching with a liquid etchant, the Si-Ge-C layer and the single crystal silicon  
24 substrate and/or one or more of the layers adjacent the Si-Ge-C layer wherein the Si-  
25 Ge-C layer etches faster than the one or more adjacent layers.

26  
27        70.    (Presently Presented)    A method of using Si-Ge-C in selective etch  
28 applications in conjunction with a single crystal substrate, comprising:

29        growing one or more epitaxial layers sequentially, starting at the single crystal  
30 substrate surface, wherein at least one of the epitaxial layers comprises Si-Ge-C,  
wherein the carbon of the Si-Ge-C layer is up to 5 atomic percent; and

1 etching with a liquid etchant, the Si-Ge-C layer and the single crystal substrate  
2 and/or one or more of the epitaxial layers adjacent the Si-Ge-C layer wherein the Si-Ge-  
3 C layer etches slower than the one or more adjacent epitaxial layers.

4  
5 71. (Presently Presented) A method of using Si-Ge-C in selective etch  
6 applications in conjunction with a single crystal substrate, comprising:

7 growing one or more epitaxial layers sequentially, starting at the single crystal  
8 substrate surface, wherein at least one of the epitaxial layers comprises Si-Ge-C,  
9 wherein the carbon of the Si-Ge-C layer is up to 5 atomic percent; and

10 etching with a liquid etchant, the Si-Ge-C layer and the single crystal substrate  
11 and/or one or more of the epitaxial layers adjacent the Si-Ge-C layer wherein the Si-Ge-  
12 C layer etches faster than the one or more adjacent epitaxial layers.

13  
14 72. (Presently Presented) A method of using Si-Ge-C in selective etch  
15 applications in conjunction with a substrate, comprising:

16 growing one or more layers sequentially, starting at the substrate, wherein at  
17 least one of the layers comprises Si-Ge-C, wherein the carbon of the Si-Ge-C layer is  
18 up to 10 atomic percent; and

19 etching with a liquid etchant, the Si-Ge-C layer and one or more layers adjacent  
20 to the Si-Ge-C layer and/or the substrate wherein the Si-Ge-C layer etches slower than  
21 the one or more adjacent layers.

22  
23 73. (Presently Presented) A method of using Si-Ge-C in selective etch  
24 applications in conjunction with a substrate, comprising:

25 growing one or more layers sequentially, starting at the substrate, wherein at  
26 least one of the layers comprises Si-Ge-C, wherein the carbon of the Si-Ge-C layer is  
27 up to 10 atomic percent; and

28 etching with a liquid etchant, the Si-Ge-C layer and one or more layers adjacent  
29 to the Si-Ge-C layer and/or the substrate wherein the Si-Ge-C layer etches faster than  
30 the one or more adjacent layers.